

upwards. This reversed position was maintained throughout the young state of the plants so long as the hood, then in the form of a thimble, had its hymenial lamellæ closely applied to the upper part of the stem; but as soon as the hood began to spread out and remove its lamellæ from contact with the stem, the latter bent upwards at a distance of about five millims. from its extremity, in such a manner as to elevate the hood and turn the lamellæ downwards. This bending was not a gradual curvature, but an actual elbow, forming a right (or even a slightly acute) angle, having for its sides the two very unequal portions of the stem, both of which were rectilinear. This turning had taken place upon all the individuals, about fifty in number, which had attained the adult state. The author confesses himself unable to suggest any satisfactory explanation of it. It is evident that the erection of the apex of the stem, which turned the hood over, must have been produced by the sudden elongation of the cellular tissue on one side of the stem to a much greater extent than that on the opposite side; but, as the author remarks, this is merely stating the crude fact, not explaining it. He says that if we chose "to employ a word now much in vogue," we might say that the portion of tissue which was active in this erection acquired at the proper moment a *tension* superior to the tissue occupying the opposite side. But this would be merely to substitute a word having a scientific appearance for more commonplace expressions, and it would still remain to be explained how this unilateral excess of elongation, or this "local tension," could have been produced in an organ in which nothing was predisposed for it, and simply because the exceptional position of the fungus had reversed the natural direction of its organs. That this change of direction is not isolated or accidental, has been proved by the author by experiments on some plants of *Claviceps purpurea* grown in a reversed position, which, on approaching maturity, turned up their stalks by describing a curve forming a larger or smaller portion of a circle, after which the extremities bearing the heads continued to grow upwards. This fact, the author thinks, is still more unfavourable to the theory of the influence of gravity upon the direction of growth of Fungi than even the phenomena observed by him in the Agaric; for the *Claviceps* has no hymenial lamellæ to exhibit the hypothetical tendency to yielding to the action of gravity, its head being nearly globular and symmetrical in all its parts.—*Comptes Rendus*, April 11, 1870, tome lxx. pp. 776-782.

Deep-sea Dredging in the Adriatic.

We understand that Prof. Oscar Schmidt of Gratz will publish in June an account of the Sponges of the Atlantic, founded chiefly on the collections made by Mr. Pourtales and the Scandinavian zoologists, and that he will proceed this summer to various parts of the Adriatic to make deep-sea dredgings, in the steamer 'Triest,' of the Imperial Austrian navy.—J. E. GRAY.